No Human Vehicle Tolling System

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ABSTRACT

Aim of the prototype is to minimize the number of Accidents occurring on roads by Red-light Jumping, over speeding and Drunk and Drive case. I would also solve the problem of Misuse of Emergency Lanes, Death of some people in Ambulance stuck in the traffic.

Traffic Accidents stands on 9th place in list of most number of human death per annum. As we have observed in everyday world, whenever a Traffic Police Inspector is standing just after the Traffic Light to fine penalty to the Red-Light Jumper in India, not even a single person jumps the Traffic Light just because the will be issued a fine which they have to pay.

"NO HUMAN VEHICLE TOLLING SYSTEM" is a highly developed prototype which uses RFID (Radio Frequency Identification) Technology and camera projections and detects the RFID tags via radio waves pre-installed in vehicles. RFID Readers would be applied on the roads which will be reading RFID tags using radio waves. As soon as a vehicle passes through the RFID reader, it reads the tag and send it to microcontroller for further processes. Arduino Mega is the Microcontroller I have used. Arduino connected to internet commands the server and start searching for the unique RFID tag in the database and proceed ahead as programed. To take a backup we are applying AI cameras which detects Number plates and reconfirm the fine.

This Prototype solves the problem of: Traffic Light Jumping, Problem of Over speeding, Emergency Vehicles stuck in Traffic Jams, tracking a Lost vehicle, Detection of Fake Vehicle number plate, Driving without Seatbelt and Helmet and Drunk and Drive Case.

Now, Appling this prototype practically in real world, I got a rough idea for about 70 – 80% in depletion in the number of accidents occurring in real world.

For a full working and proof of my Prototype please refer to the link below

YouTube Video Link: https://youtu.be/OJvxadXaHm8

Keywords: safety;accidents;live-saving;